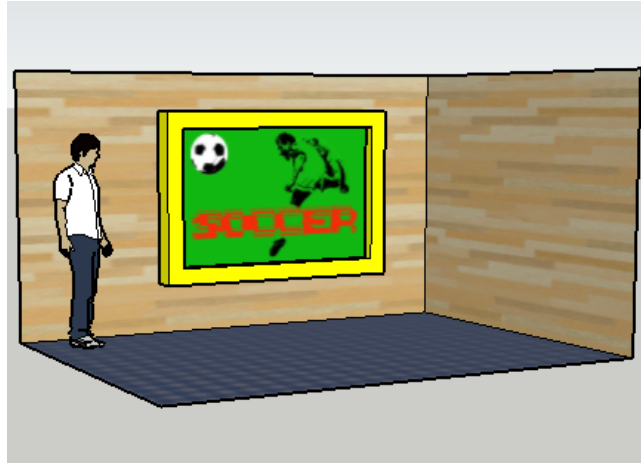


Creating a Poster in Google SketchUp

If you have digital image, or can find one online, you can easily make that image into a room poster.



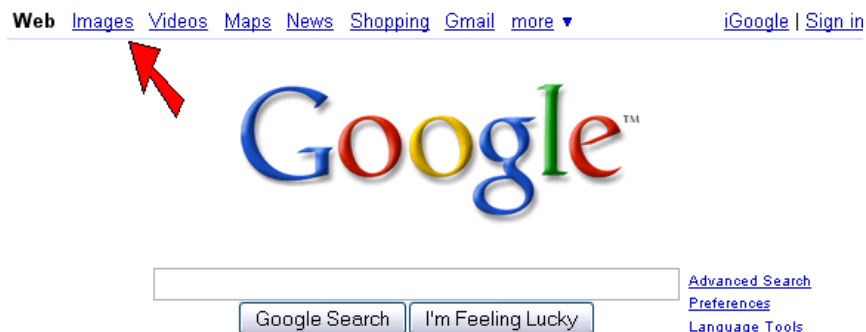
For this project, it helps to have some basic knowledge of Google SketchUp (though detailed instructions are provided). In particular, it's important to know how to zoom, rotate, and pan the view. If you need more information on how to get started, and a description of some basic tools, please read [3DVinci's Getting Started Guide \(PDF\)](#).

PC users: go to http://www.3dvinci.net/SketchUp_Intro_PC.pdf.

Mac users: go to http://www.3dvinci.net/SketchUp_Intro_MAC.pdf.

Step 1: Find the Poster Image

1. Any digital image will work as a poster, including ones from your own camera. I like using Google Images; if you don't know how to get there, start at www.google.com and click the "Images" link.



2. I want to find a soccer poster.



3. Of the dozens of images found, I want to use this green one. Click the image thumbnail to find a larger version.



It's usually a good idea to download the largest available version of an image, so that the picture within SketchUp will be as clear as possible. If the image size is huge, this will result in a large SketchUp file, but most online images aren't very large. (Size is something to keep in mind if you're using your own digital pictures.)

4. Click "See full-size image."



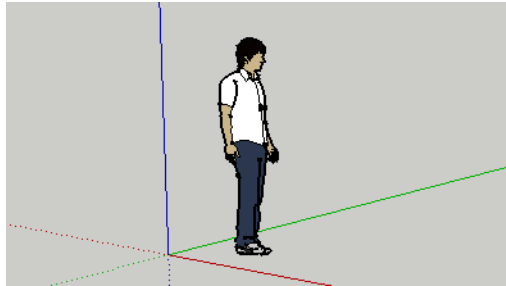
5. When you see the large version, right-click on the image in your browser, and choose a download option. Depending on your browser, this option might be **Save Image As**, **Save Picture As**, etc.



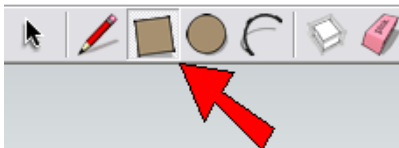
6. Save the image to a folder you'll remember.

Step 2: Make a Room in SketchUp

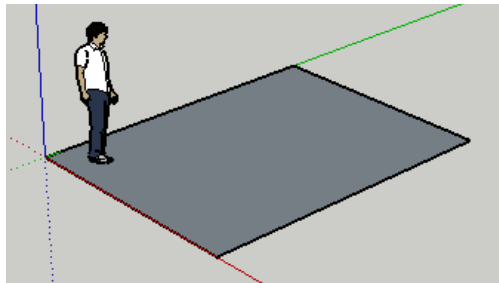
1. Open Google SketchUp. I'm using one of the Architectural templates, so I have a person standing near the origin (his name is Sang). I'm going to keep Sang there, to use as a reference when I size my room. (You don't need Sang in your file, because it doesn't really matter what size your room is. But if he's already there, you might as well keep him around.)



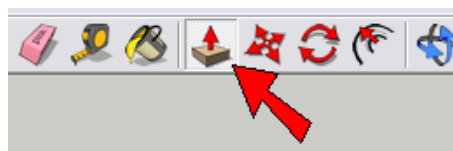
2. This room will be a box with some faces missing. To create the box, activate the **Rectangle** tool.



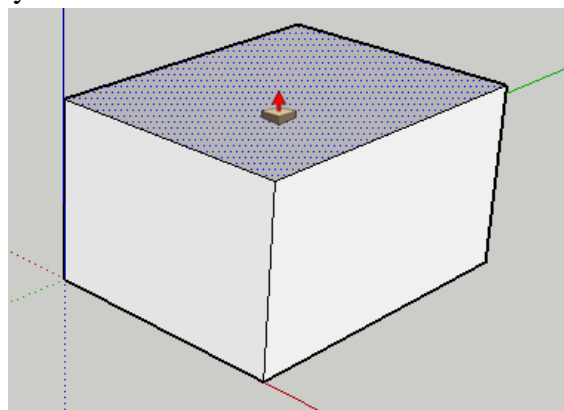
3. Click two corner points to create the rectangle on the ground.



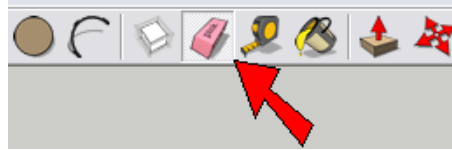
4. Activate **Push/Pull**.



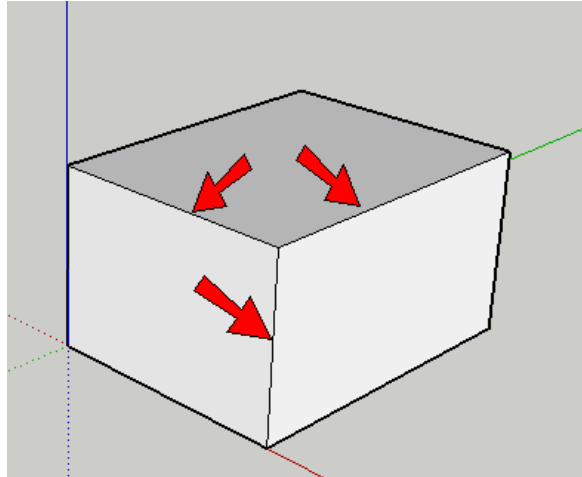
5. Click the rectangle, pull it up to make a box, and click again when it's the height you want. If Sang is in your file, make sure he's completely inside the box.



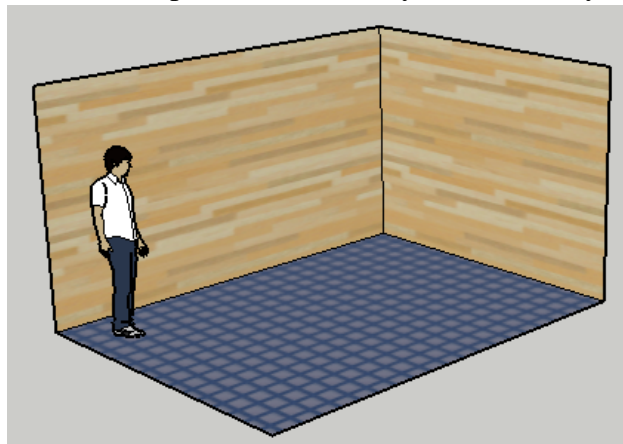
6. To remove walls, click the **Eraser**.



7. Click these three edges:



You're left with two walls and a floor. I painted mine, but you can leave yours unpainted.



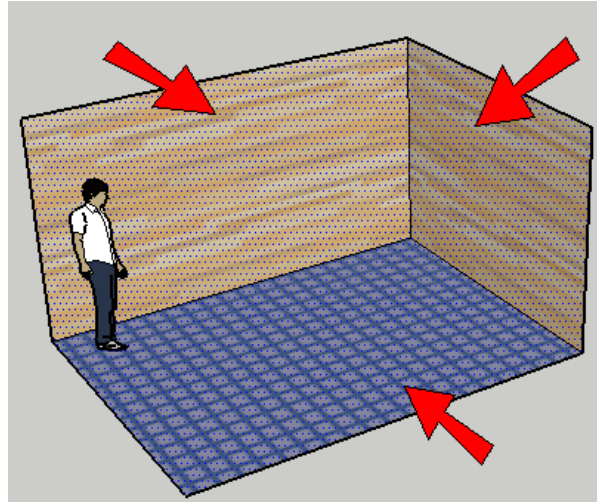
When dealing with a room, you should get into the habit of making it into a group before placing anything inside. This prevents other objects from making changes to the walls, and keeps things from “sticking” to walls.

When talking about groups, “sticking” is different than “aligning.” You can align anything (like a clock or picture) to a wall that’s inside a group. But if a wall is not grouped, it’s harder to move or remove objects from it (unless that object is a group itself, or a component).

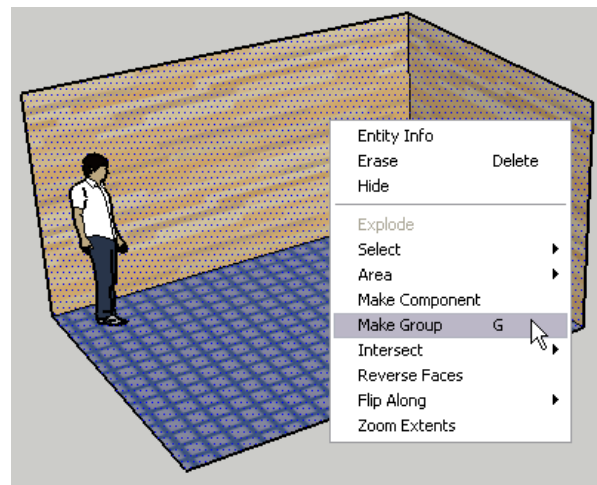
8. First we need to select what’s in the group, so activate the **Select** tool.



9. Press and hold the Shift key so that you can select more than one object. Click all three faces, and they should all be highlighted.



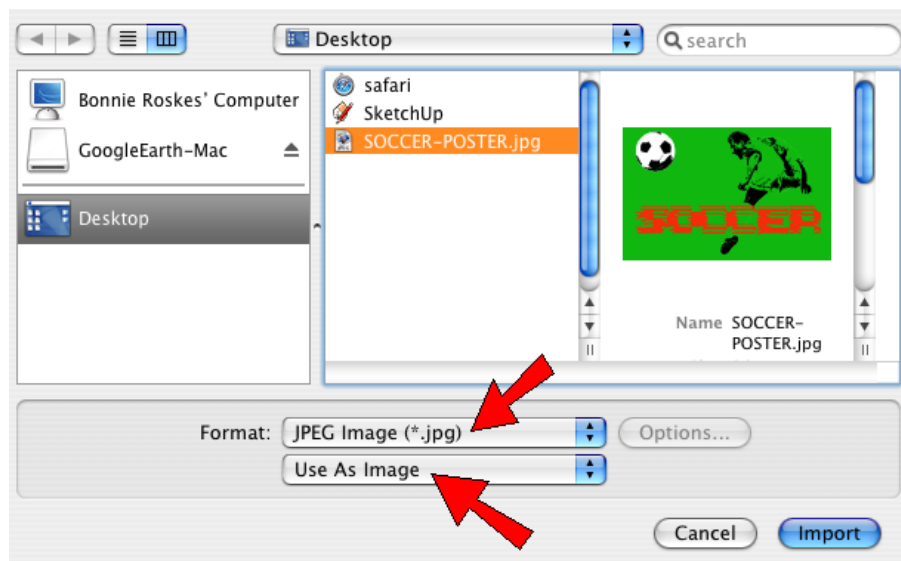
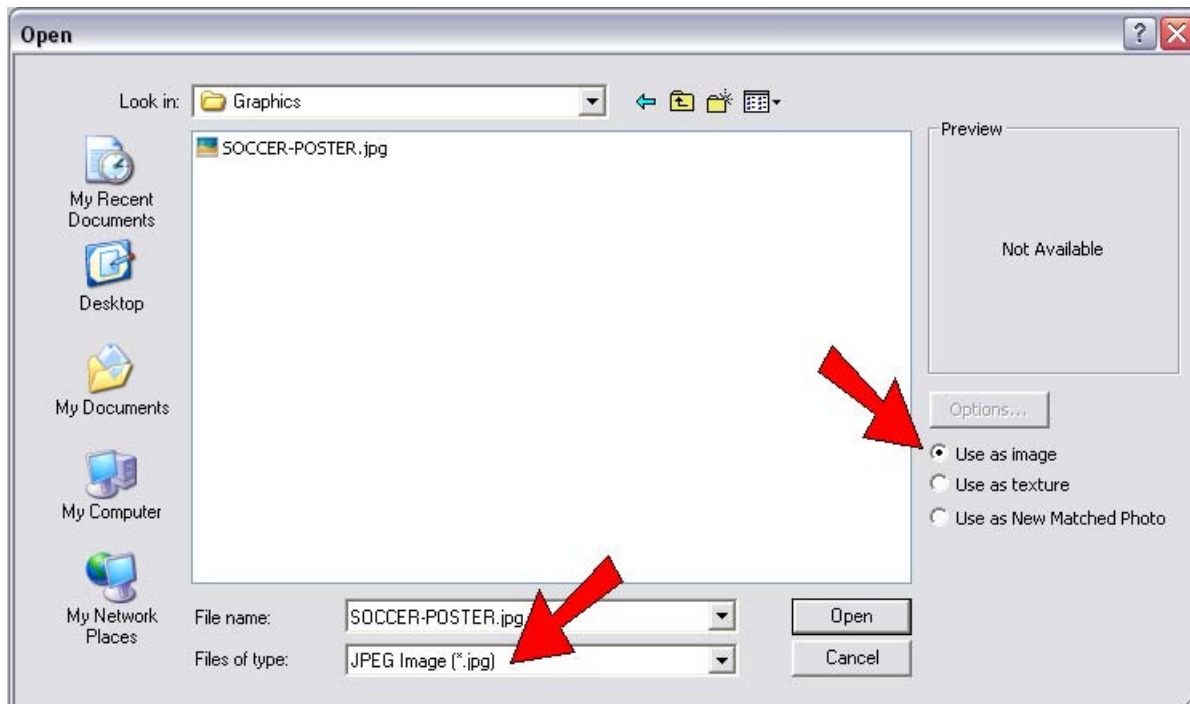
10. Right-click on any selected face and choose **Make Group**.



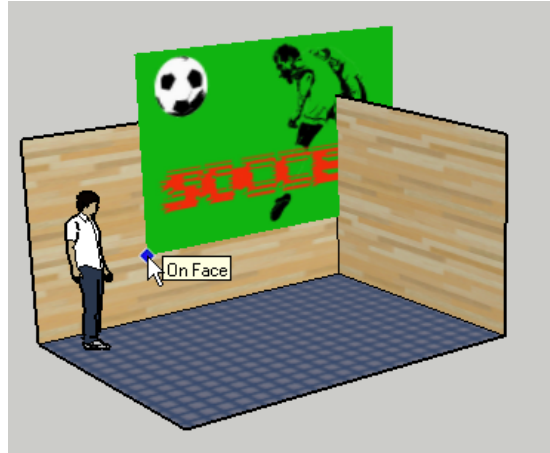
11. This results in a bounding box around the entire room, meaning the room is grouped and selected. To unselect it, right-click anywhere in blank space.

Step 3: Import the Poster

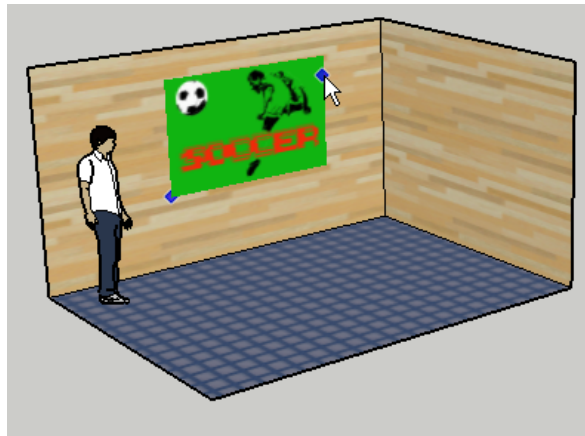
1. Choose **File / Import** from the main menu. Make sure you are looking for the correct file type (JPG in my case, but there is also an option to search for all image types). Also, make sure **Use as image** is checked. Then browse to where you saved your poster image, and import it.



2. The image is now attached to your cursor. Click on the wall where you want to place the lower left corner of the image.



3. Click again to size the poster.



That's basically all there is to it, if you're happy with a flat image against the wall. This now looks like a real poster, tacked up on a wall with no frame.

But what if you want to add a frame to your poster?

Step 4: Add a Frame

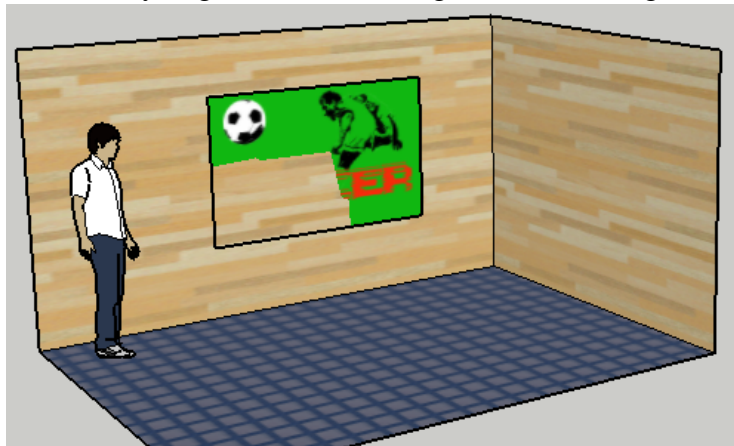
You imported the poster as an image, as opposed to a texture. An image looks like a face but doesn't exactly act like one, so it can't be edited like a "normal" SketchUp face. For example, if you activate **Push/Pull** and try to pull the image out from the wall, SketchUp won't allow it.



4. To turn the image into a face, right-click on it and choose **Explode**.



5. Now the image is a face. But here's another problem: the image and the wall are on the same plane, and SketchUp doesn't know which one is supposed to be in front. So SketchUp doesn't know which material to apply inside the picture face, and you get a weird-looking mix of the image and the wall material.

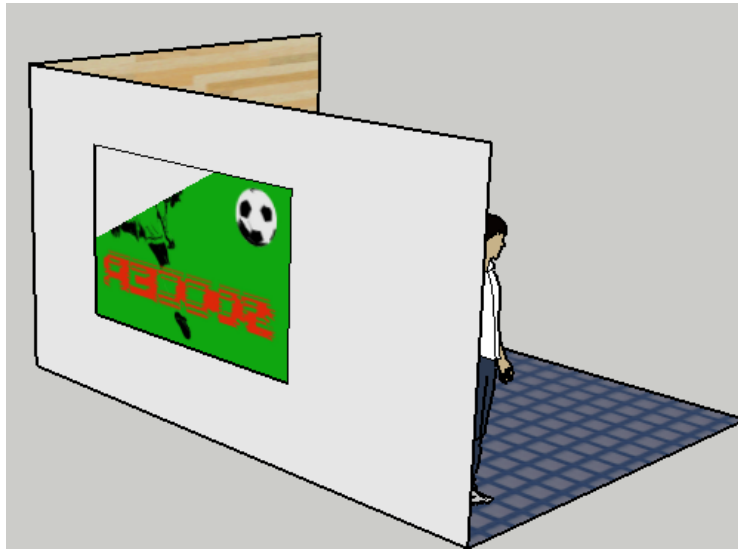


You can see this material mix-up when you orbit around. This is sometimes called “shimmering” or “Z-fighting.”

6. To eliminate this material confusion, use **Push/Pull** to pull the poster from the wall, just a tiny bit.



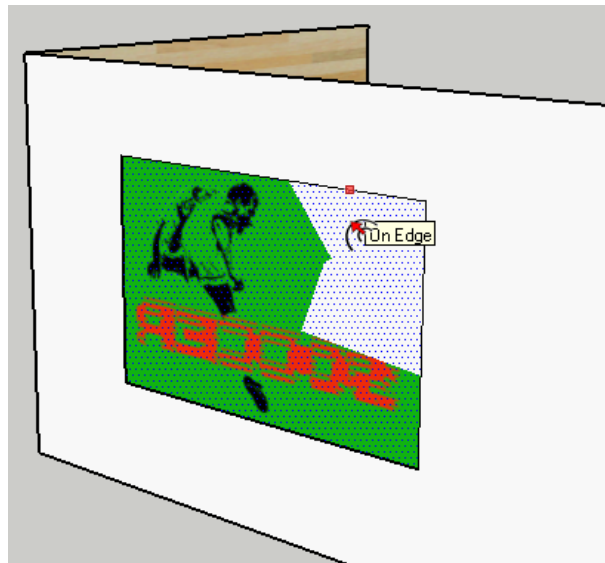
7. Now onto the frame. The frame should start against the wall and end slightly in front of the poster image. The easiest way to start the frame is to offset the back face of the poster. And the easiest way to find the back face of the poster is to orbit around behind the poster's wall.



8. Activate the **Offset** tool.

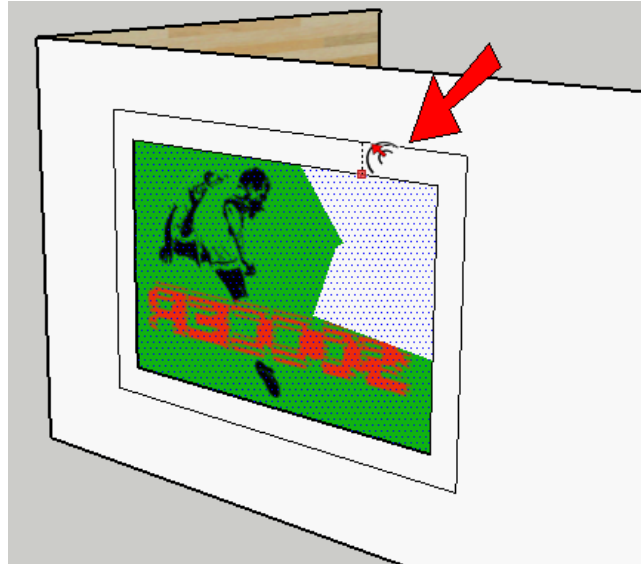


9. Move your cursor around the back of the wall. Only the poster face becomes highlighted.



If you're wondering why the wall itself does not highlight, it's because the wall is inside the room group, and can't be "touched" by any editing tools. To change the wall itself, you would have to edit the room group.

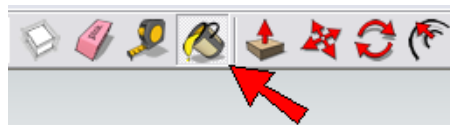
10. Click inside the poster face then click again to create a larger rectangle outside the poster.



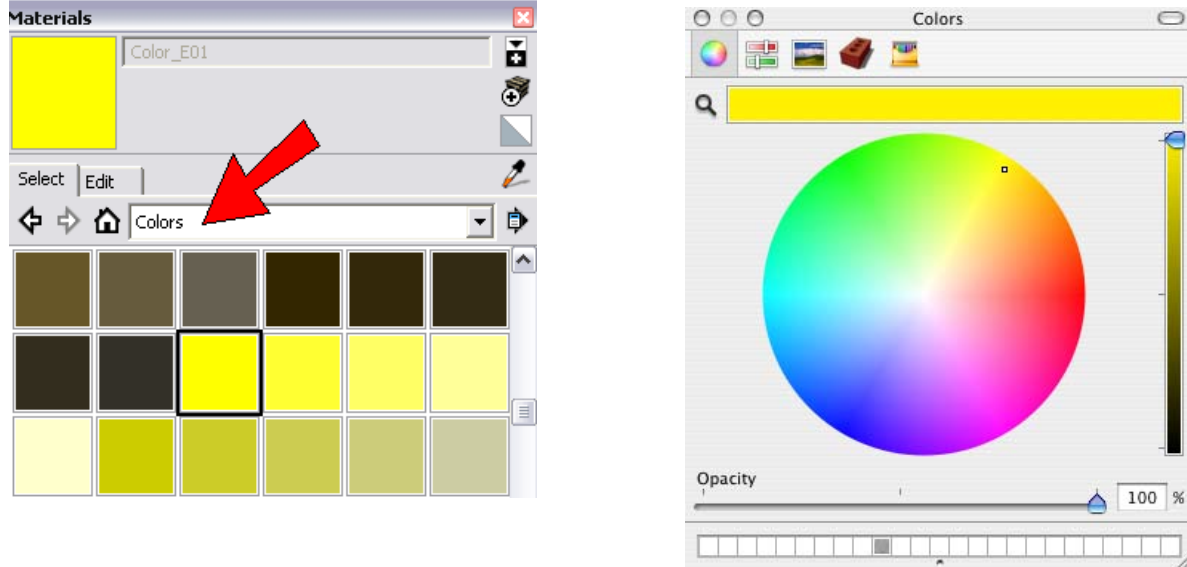
11. Orbit back around to see the inside of the room, and you can see the frame face.



12. To paint the frame, click the **Paint Bucket**.

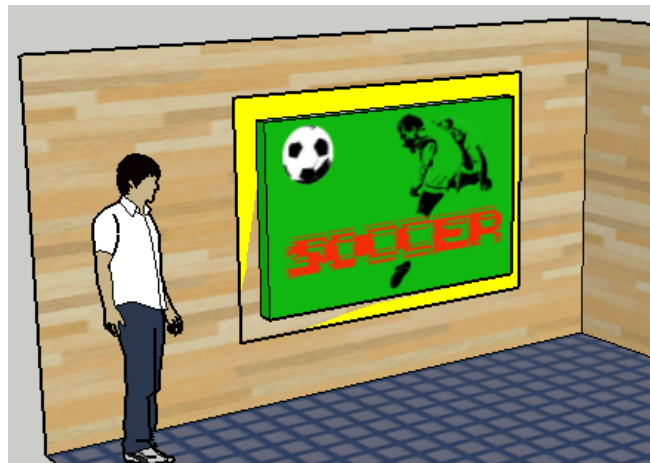


13. In the **Materials** window (Windows) or the **Colors** window (Mac), choose a collection of colors or materials and click a thumbnail to activate one. I'm using a yellow color.



(If you're a Mac user, there are several options for picking colors; the graphic above shows the color wheel. If you want to find textures as well as color swatches, click the brick icon, then select the collection you want.)

14. Click the frame face to paint it.



15. Use **Push/Pull** to extend the frame past the wall. The **Push/Pull** operation might pause at the front of the poster face, but you can wiggle your mouse to continue past it.



That's it! You can apply this technique to decorate a whole house, a classroom, or even an art museum.

If you try this project with your children or students, and have a fantastic model you'd like to share, please let me know! I will be happy to blog about it, and/or feature it on our online forum for SketchUp and education. Contact me at bonnie@3dvinci.net. Thanks!

And if you enjoy using 2D graphics in 3D models, you'll love 3DVinci's book *Painting with Pictures*, part of our ModelMetricks Intermediate series. Check it out at http://www.3dvinci.net/ccp0-prodshow/MI2_PDF.html.

